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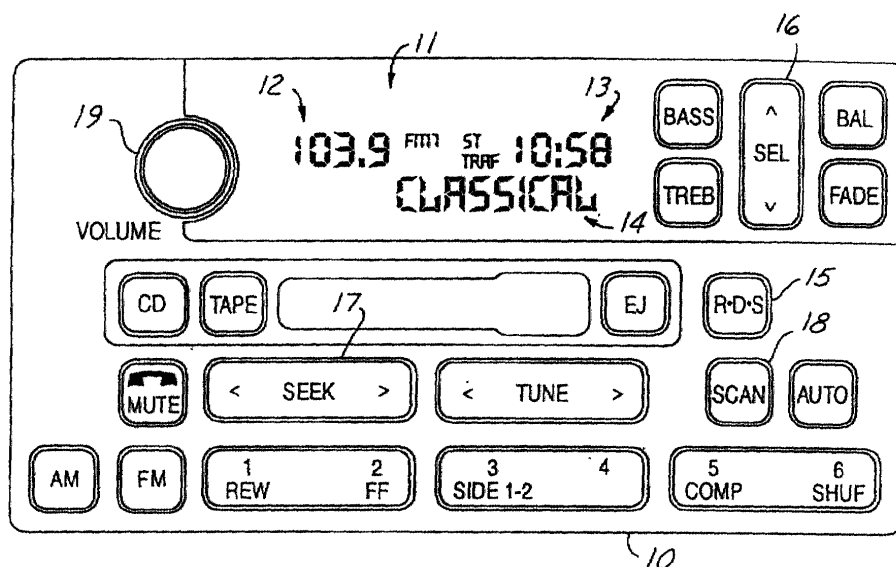
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(54) **RDS radio with multi-function RDS button**

(57) A multi-function RDS button and a menu driven interface for accessing RDS features facilitates easy access to RDS functions with minimal demands upon the attention of the user. Large numbers of push buttons with cryptic labels and unintuitive push-button sequences of prior RDS radio receivers are avoided. Due to a long time-out period provided before automatically exiting the menu, the user can alternate attention between the radio and the road without losing their place in the menu or initiating an unwanted action.

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**FIG. 1**

**EP 0 901 247 A3**



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# EUROPEAN SEARCH REPORT

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| DOCUMENTS CONSIDERED TO BE RELEVANT                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                              |                                                         |                                              |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------|----------------------------------------------|
| Category                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Citation of document with indication, where appropriate, of relevant passages                                                                                                                                                                | Relevant to claim                                       | CLASSIFICATION OF THE APPLICATION (Int.Cl.6) |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | TOPPING P: "RADIO DATA SYSTEM (RDS) DECODER WITH CLOCK/ALARM FUNCTION"<br>ELEKTOR ELECTRONICS, GB, ELEKTOR PUBLISHERS LTD. CANTERBURY,<br>vol. 20, no. 218, 1994, pages 24-31,<br>XP000430253<br>ISSN: 0268-4519<br>* figure 1; tables 3,4 * | 1-9                                                     | H04H1/00<br>G08G1/09<br>H04B1/08             |
| X                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EP 0 512 206 A (GRUNDIG EMV)<br>11 November 1992 (1992-11-11)                                                                                                                                                                                | 1,2                                                     |                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | * column 3, line 54 - column 4, line 30 *                                                                                                                                                                                                    | 3-9                                                     |                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | DE 43 29 552 A (BECKER GMBH)<br>9 March 1995 (1995-03-09)<br>* the whole document *                                                                                                                                                          | 1-9                                                     |                                              |
| A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | EP 0 660 288 A (PHILIPS PATENTVERWALTUNG<br>;KONINKL PHILIPS ELECTRONICS NV (NL))<br>28 June 1995 (1995-06-28)<br>* the whole document *                                                                                                     | 1-9                                                     |                                              |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                              |                                                         | TECHNICAL FIELDS<br>SEARCHED (Int.Cl.6)      |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                              |                                                         | H04H<br>G08G<br>H04B                         |
| The present search report has been drawn up for all claims                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                              |                                                         |                                              |
| Place of search<br><b>MUNICH</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                              | Date of completion of the search<br><b>23 July 2001</b> | Examiner<br><b>Willems, B</b>                |
| <p>CATEGORY OF CITED DOCUMENTS</p> <p>X : particularly relevant if taken alone<br/>Y : particularly relevant if combined with another document of the same category<br/>A : technological background<br/>O : non-written disclosure<br/>P : intermediate document</p> <p>T : theory or principle underlying the invention<br/>E : earlier patent document, but published on, or after the filing date<br/>D : document cited in the application<br/>L : document cited for other reasons<br/>&amp; : member of the same patent family, corresponding document</p> |                                                                                                                                                                                                                                              |                                                         |                                              |

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**ANNEX TO THE EUROPEAN SEARCH REPORT  
ON EUROPEAN PATENT APPLICATION NO.**

EP 98 11 5232

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.  
The members are as contained in the European Patent Office EDP file on  
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23-07-2001

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|-------------------------------------------|---------------------|----------------------------|---------------------|
| EP 0512206 A                              | 11-11-1992          | DE 4115051 A               | 12-11-1992          |
|                                           |                     | DE 59208530 D              | 03-07-1997          |
| DE 4329552 A                              | 09-03-1995          | DE 9321550 U               | 02-09-1999          |
| EP 0660288 A                              | 28-06-1995          | DE 4344173 A               | 29-06-1995          |
|                                           |                     | DE 59409103 D              | 02-03-2000          |
|                                           |                     | JP 7264086 A               | 13-10-1995          |
|                                           |                     | US 5603108 A               | 11-02-1997          |

EPO FORM P0459

For more details about this annex : see Official Journal of the European Patent Office, No. 12/82